

**INTRODUCTION  
DRAFT REGULATIONS  
FIELDS-OF-TESTING  
R-40-01**

Through the past few years, the Environmental Laboratory Accreditation Program (ELAP) has received numerous comments from individual laboratories and the laboratory advisory group in the form of proposed changes. Elements from these comments were included in the Department's draft of the proposed regulations for the fields-of-testing. The format of the proposed regulations is different from the current regulations to accommodate future updates. Also, the proposed regulations are more comprehensive and reference publications to address the needs of the State.

The draft regulations were posted on the ELAP web site in 2003 upon the request of the laboratory advisory group for a 30-day period as it was not considered a lengthy document. The draft regulations were removed from the ELAP web site in December, after a 60-day posting period. No comments were received at ELAP during this period of posting.

These same draft regulations are being posted again on our website as instructed by management. They are presently undergoing changes.

## REPEAL OF REGULATIONS

### Section 64811 Test Methods

Repealed in its entirety and replaced with the proposed new regulations 64811 through 64811.78.

### ~~Section 64811. Test Methods~~

~~(a) Laboratories certified for any Subgroup within Fields of Testing 1 through 6, as identified in Section 64823, shall employ those methods found in 40 Code of Federal Regulations Part 141 as amended July 17, 1992, 57 Federal Register 31776.~~

~~- (b) Laboratories certified for any Subgroup within Fields of Testing 9 through 14, as identified in Section 64823, shall employ those methods found in Article 5, Section 66260.11, Title 22, California Code of Regulations.~~

~~(c) Laboratories certified for any Subgroup within Fields of Testing 8 or 16 through 19, as identified in Section 64823, shall employ those methods found in 40 Code of Federal Regulations Part 136, amended September 11, 1992, 57 Federal Register 41830, or methods stated in any permit issued by a California Regional Water Quality Control Board. If no method is stated in the permit and there is no method cited for the substance in Part 136, the laboratory is to seek approval for the use of the method from the Regional Board issuing the permit.~~

~~(d) Laboratories certified for any Subgroup within Fields of Testing 20, 21, or 22, as identified in Section 64823, shall develop and employ analytical confirmation procedures for the verification of pesticide identification and quantification.~~

~~(e) Laboratories certified for any Subgroup within Field of Testing 7, as identified in Section 64823, shall employ those methods found in either "Recommended Procedures for the Examination of Sea Water and Shellfish", 4th edition, 1970, American Public Health Association (APHA); or "official Methods of Analysis of the Association of Official Analytical Chemists", 14th edition, 1984, AOAC, Arlington, Virginia. Laboratories certified in any Subgroup within Field of Testing 15, as identified in Section 64823, shall employ methods which were submitted to the Department at time of application for certification, or at time of request to add a Subgroup within a Field of Testing and which have been approved by the Department for use in the laboratory.~~

~~(f) Laboratories may substitute alternate test methods for those allowed by (a) above. If such substitution is desired, the laboratory shall obtain written approval for the alternate test method to be utilized from the United State Environmental Protection Agency (EPA) through that agency's Alternate Test Procedure approval process, or shall obtain a waiver from the Environmental Laboratory Accreditation Program (ELAP), prior to implementing any substitution. ELAP may grant a waiver when a State Maximum Contaminant Level (MCL) is more stringent than a federal MCL or no State~~

~~MCL exists and when ELAP determined that the test method the laboratory proposes to use is one for which that laboratory was previously ELAP certified. A waiver shall be valid until a new State MCL is adopted for the analyte being detected by the method.~~

~~(g) Laboratories may substitute alternate test methods for those allowed by (b) above. If such substitution is desired, the laboratory shall obtain written approval for the alternate test method to be utilized from the California Environmental Protection Agency, Hazardous Materials Laboratory, Berkeley, California prior to implementing any substitutions.~~

~~(h) Laboratories may substitute alternate test methods for those allowed by (c) above. If such substitution is desired, the laboratory shall obtain written approval for the alternate test methods to be utilized from the United States Environmental Protection Agency (EPA) through that agency's Alternate Test Procedure approval process prior to implementing any substitution.~~

~~(i) Laboratories seeking certification for the subgroups consisting of fecal coliform or Escherichia coli (E.coli) organism technics, must also obtain, or hold, certification for the subgroups consisting of the same technic for total coliform organisms.~~

~~(j) To gain certification for individual radioactive elements or isotopes, except for uranium by fluorimetric technics, a laboratory shall obtain certification for gross alpha and beta radiation testing.~~

~~(k) A laboratory may seek certification, or hold certification for Field of Testing 11 without seeking or holding certification in Fields of Testing 10, 12, or 13. However, the laboratory shall submit all resulting preparations from the use of any of the subgroup members of Field of Testing 11 to a laboratory certified for Fields of Testing 10, 12, 94 13.~~

## Section 64823 Fields of Testing

Repealed in its entirety and replaced with the proposed new regulations 64811 through 64811.78.

## Article 12. Subgroups for Fields of Testing

### Section 64823. Fields of Testing

~~(a) Field of Testing 1 consists of those methods whose purpose is to detect the presence of microorganisms in the determination of drinking water or wastewater quality and encompasses the following Subgroups: detection of total coliform, fecal coliform, or Escherichia coli (E. coli) organisms by Multiple Tube Fermentation technics; detection of total coliform, fecal coliform, or Escherichia coli (E. coli) organisms by Membrane Filter technics; Heterotrophic Place Count technics; detection of both total coliforms and Escherichia coli (E. coli) organisms by the Minimal Medium ortho-nitrophenyl beta-D-galactopyranoside-4-methylumbelliferyl-beta-D-glucuronide (MMO-MUG) technics; detection of total coliform, fecal coliform, or Escherichia coli (E. coli) organisms by use of Clark's Presence/Absence medium; Fecal streptococci and Enterococci by Multiple Tube Fermentation technics, Fecal streptococci and Enterococci by Membrane Filter technics; detection of total coliforms and fecal coliforms other than for drinking water or wastewater quality.~~

~~(b) Field of Testing 2 consists of those analytes or methods whose purpose is to detect the presence of inorganic substances in the determination of drinking water quality and whose methods require the use colorimetric, gravimetric, titrimetric, electrometric, or ion chromatographic technic; and encompasses the following Subgroups: alkalinity; calcium (titrimetric technics); chloride; corrosivity; fluoride; hardness (direct determination); magnesium (titrimetric technics); methylene blue active substances (MBAS); nitrate; nitrite; sodium (flame emission technics); sulfate; total filterable residue and conductivity; iron; manganese; ortho-phosphate; silica; cyanide; potassium (flame emission technics).~~

~~(c) Field of Testing 3 consists of those methods whose purpose is to detect the presence of trace metals, or asbestos in the determination of drinking water quality and whose methods require the use of an atomic absorption, inductively coupled plasma, inductively coupled plasma/mass spectrophotometer, or electron microscope device and encompasses the following Subgroups: arsenic; barium; cadmium; total chromium; copper; iron; lead; manganese; mercury; selenium; silver; zinc; aluminum; asbestos; antimony; beryllium; nickel; thallium; calcium; magnesium; sodium; potassium.~~

~~(d) Filed of Testing 4 consists of those methods whose purpose is to detect the presence of trace organics in the determination of drinking water quality, and require the use of a gas chromatographic/mass spectrophotometric device and encompasses the following Subgroups: EPA method 524.2 for volatile organics; EPA method 501.3 for~~

trihalomethanes; EPA method 525 for acid and base/neutral compounds; EPA method 513 for dioxins; EPA method 1613 for dioxins.

~~(e) Field of Testing 5 consists of those methods whose purpose is to detect the presence of trace organics in the determination of drinking water quality and do not require the use of a gas chromatographic/mass spectrophotometric device and encompasses the following Subgroups: EPA method 501.1 for trihalomethanes; EPA method 508 for chlorinated pesticides; EPA method 515.1 for chlorophenoxyherbicides; EPA method 502.1 for halogenated volatiles; EPA method 503.1 for aromatic volatiles; EPA method 502.2 for both halogenated and aromatic volatiles; EPA method 504 for EDB and DBCP; EPA method 505 for chlorinated pesticides and polychlorinated biphenyls; EPA method 507 for the haloacids; EPA method 531.1 for carbamates; EPA method 547 for glyphosate; EPA method 506 for adipates and phthalates; EPA method 508A for total polychlorinated biphenyls; EPA method 548 for endothall; EPA method 549 for diquat and paraquat; EPA method 550 for polycyclic aromatic hydrocarbons; EPA method 550.1 for polycyclic aromatic hydrocarbons; EPA method 551 for chlorination disinfection byproducts; EPA method 552 for haloacetic acids.~~

~~(f) Field of Testing 6 consists of those methods whose purpose is to detect the presence of radioactive substances in drinking water, wastewater, or hazardous wastes; and encompasses the following Subgroups: gross alpha and beta radiation; total radium; radium 226; uranium; radon 222; radioactive cesium; iodine 131; radioactive strontium; tritium; gamma emitting isotopes; gross alpha by coprecipitation; radium 228; radioactive iodine; gross alpha and beta radiation in hazardous wastes; alpha emitting radium isotopes in hazardous wastes; radium 228 in hazardous wastes.~~

~~(g) Field of Testing 7 consists of those methods whose purpose is to detect the presence of microbial contamination or toxins in the determination of shellfish meat quality and encompasses the following Subgroups: shellfish meat microbiology; paralytic shellfish poison (PSP) and other marine biotoxins; microbiology of shellfish growing waters.~~

~~(h) Field of Testing 8 consists of those methods whose purpose is to detect the presence of toxins in the determination of wastewater quality, or in hazardous wastes and encompasses the following Subgroups: hazardous waste testing pursuant to Title 22, California Code of Regulations, Section 66261.24(a)(6); wastewater testing according to Kopperdahl (1976) using freshwater fish; wastewater testing according to EPA/600/4-85/013 using freshwater and/or marine organisms; wastewater testing by EPA method 1000.0; wastewater testing by EPA method 1002.0; wastewater testing by EPA method 1003.0; wastewater testing by EPA method 1006; wastewater testing by EPA method 1007; wastewater testing by EPA method 1009; wastewater testing according to Anderson, et al. (1990) using Giant Kelp (*Macrocystis pyrifera*); wastewater testing according to Anderson, et al. (1990) using red abalone (*Haliotis rufescens*); wastewater testing according to Dinnel and Stober (1987) using purple sea urchin (*Strongylocentrotus purpuratus*); wastewater testing according to Dinnel and Stober (1987) using red sea urchin (*Strongylocentrotus franciscanus*); wastewater testing~~

according to Dinnel and Stober (1987) using san dollar (*Dendraster excentricus*); wastewater testing according to procedure E724-89 (ASTM, 1989) using Pacific oyster (*Crassostrea gigas*); wastewater testing according to procedure E724-89 (ASTM, 1989) using California Bay Mussel (*Mytilus edulis*); wastewater testing according to procedure E1218-90 (ASTM, 1990) using an alga (*Skeletonema costatum*); wastewater testing according to EPA/600/4-90/027 using fresh water and/or marine organisms.

(i) ~~Field of Testing 9 consists of those methods whose purpose is to detect physical properties of hazardous wastes for regulatory purposes and encompasses the following Subgroups: ignitability; corrosivity by pH determination; corrosivity by corrosivity towards steel; reactivity.~~

(j) ~~Field of Testing 10 consists of those methods whose purpose is to detect the presence of inorganic substances in hazardous waste samples and encompasses the following Subgroups: antimony; arsenic; barium; beryllium; cadmium; chromium, total; cobalt; copper; lead; mercury; molybdenum; nickel; selenium; silver; thallium; vanadium; zinc; chromium (VI); cyanide; fluoride; sulfide; total organic lead.~~

(k) ~~Field of testing 11 consists of those methods whose purpose is to prepare samples of hazardous wastes for further testing and encompasses the following Subgroups: California waste extraction test WET); extraction procedure toxicity (EP TOX); toxicity characteristic leaching procedure (TCLP), all phases; TCLP, extraction of inorganics only; TCLP, extraction of semivolatile organics only; TCLP, extraction of volatile organics only.~~

(l) ~~Field of Testing 12 consists of those methods whose purpose is to detect the presence of trace organics in hazardous waste samples, and do not require the use of a gas chromatographic/mass spectrophotometric device and encompasses the following Subgroups: EPA method 8240 for volatile compounds; EPA method 8250 for semivolatile compounds; EPA method 8270 for semivolatile compounds; EPA method 8280 for dioxins, EPA method 8290, EPA method 8260.~~

(m) ~~Field of Testing 13 consists of those methods whose purpose is to detect the presence of trace organics in hazardous waste samples, and do not require the use of a gas chromatographic/mass spectrophotometric device and encompasses the following Subgroups: EPA method 8010 for halogenated volatiles; EPA method 8015 for nonhalogenated volatiles; EPA method 8020 for aromatic volatiles; EPA method 8030 for acrolein, acrylonitrile, acetonitrile; EPA method 8040 for phenols; EPA method 8060 for phthalate esters; EPA method 8080 for organochlorine pesticides or polychlorinated biphenyls; EP method 8090 for nitroaromatics and cyclic ketones; EPA method 8100 for polynuclear aromatic hydrocarbon; EPA method 8130 for polynuclear aromatic hydrocarbons; EPA method 8120 for chlorinated hydrocarbons; EPA method 8140 for organophosphorus pesticides; EPA method 8150 for chlorinated herbicides; EPA method 632 for carbamates; total petroleum hydrocarbons gasoline (LUFT manual); total petroleum hydrocarbons diesel (LUST manual); EPA method 8011; EPA method~~

8021; EPA method 8070; EPA method 8110; EPA method 8141; EPA method 8330; EPA method 8080 for PCBs only; EPA method 8080 for chlorinated pesticides only.

~~(n) Field of testing 14 consists of those methods whose purpose is to detect the presence of asbestos for purposes of complying with the provisions of Title 22, California Code of Regulations, Section 66261.24(a)(92)(A) and encompasses the following Subgroups; asbestos by polarized light microscopy.~~

~~(o) Field of Testing 15 shall be any method whose purpose is to detect the presence of any analyte found in the list of substances regulated by the California Safe Drinking water and Toxic Enforcement Act in drinking water, wastewater, hazardous wastes, and contaminated soils or sediments, but which method is not within any subgroup of any other Field of Testing cited in this section.~~

~~(p) Field of Testing 16 consists of those methods whose purpose is to detect the presence of inorganic substances, nutrients, physical or chemical demands, or physical properties in the determination of wastewater quality, and whose methods require the use colorimetric, gravimetric, titrimetric, electrometric, or ion chromatographic technics and encompasses the following Subgroups: acidity; alkalinity (includes determination of bicarbonate, carbonate, & hydroxide); ammonia; biochemical oxygen demand (BOD); boron; bromide; calcium (titrimetric technics); carbonaceous biochemical oxygen demand (cBOD); chemical oxygen demand (COD); chloride; chlorine residual, total; cyanide; cyanide amenable to chlorination; fluoride; hardness (direct determination); kjeldahl nitrogen (includes determination of organic nitrogen); magnesium (titrimetric technics); nitrate; nitrite; oil and grease; organic carbon; oxygen, dissolved, pH; phenols; phosphate ortho; phosphorus, total; potassium (flame emission technics); residue, total; residue, filterable (total dissolved solids); residue, nonfilterable (total suspended solids); residue, settleable (settleable solids); residue, volatile; silica; sodium (flame emission technics); specific conductance; sulfate; sulfide (includes total and soluble); sulfite; surfactants (MBAS); tannin and lignin; turbidity; iron; manganese; total recoverable hydrocarbons by EPA method 418.1; total organic halides.~~

~~(q) Field of Testing 17 consists of those methods whose purpose is to detect the presence of trace metals, or asbestos in the determination of wastewater quality and whose methods require the use of an atomic absorption, inductively coupled plasma, inductively coupled plasma/mass spectrophotometer, or electron microscope devise and encompasses the following Subgroups; aluminum; antimony; arsenic; barium; beryllium; cadmium; chromium (VI); chromium, total; cobalt; copper; gold; iridium; iron; lead; manganese; mercury; molybdenum; nickel, osmium; palladium; platinum; rhodium; ruthenium; selenium; silver; strontium; thallium; tin; titanium; vanadium; zinc; asbestos; calcium; magnesium; potassium; sodium.~~

~~(r) Field of Testing 18 consists of those methods whose purpose is to detect the presence of trace organics in the determination of wastewater quality, and require the use of a gas chromatographic/mass spectrophotometric device and encompasses the following Subgroups; EPA method 624 for volatile organics; EPA method 625 for acid~~

and base/neutral compounds; EPA method 1613 for dioxins; EPA method 1625 for dioxins; EPA method 613.

~~(s) Field of Testing 19 consists of those methods whose purpose is to detect the presence of trace organics in the determination of wastewater quality, and do not require the use of a gas chromatographic/mass spectrophotometric device and encompasses the following Subgroups; EPA method 601 for halogenated volatiles; EPA method 602 for aromatic volatiles; EP method 603 for acrolein, acrylonitrile, acetonitrile; EP method 604 for phenols; EPA method 605 for benzidine; EPA method 606 for phthalate esters; EPA method 607 for nitrosoamines; EPA method 608 for organochlorine pesticides or polychlorinated biphenyls; EPA method 609 for nitroaromatics and cyclic ketones; EPA method 610 for polynuclear aromatics; EPA method 612 for haloethers; EPA method 632 for carbamates; EPA method 619; EPA method 608 for PCBs only; EPA method 608 for chlorinated pesticides only.~~

~~(t) Field of Testing 20 consists of those methods whose purpose is to detect the presence of inorganic pesticide residues in raw agricultural or bulk processed food and encompasses the following Subgroups; pesticide residues in processed foods detected by either atomic absorption, inductively coupled plasma, inductively coupled plasma/mass spectrophotometer, or colorimetric techniques; pesticide residues in raw commodities detected by either atomic absorption, inductively coupled plasma, inductively coupled plasma/mass spectrophotometer, or colorimetric techniques; pesticide residues in dairy products detected by either atomic absorption, inductively coupled plasma, inductively coupled plasma/mass spectrophotometer, or colorimetric techniques; pesticide residues in feed products detected by either atomic absorption, inductively coupled plasma, inductively coupled plasma/mass spectrophotometer, or colorimetric techniques.~~

~~(u) Field of Testing 21 consists of those methods whose purpose is to detect the presence of organic pesticide residues in raw agricultural or bulk processed food, and require the use of a gas chromatographic/mass spectrophotometric device and encompass the following Subgroups: chromatographic/mass spectrophotometric methods in either processed foods; raw commodities; dairy products; feed products.~~

~~(v) Field of Testing 22 consists of those methods whose purpose is to detect the presence of organic pesticide residues in raw agricultural or bulk processed food, and do not require the use of a gas chromatographic/mass spectrophotometric device and encompass the following Subgroups: halogenated compounds in processed foods detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry techniques; organophosphorous compounds in processed foods detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry techniques; carbamates in processed foods detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry techniques; halogenated compounds in raw commodities detected by either gas chromatograph, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry~~



~~technics; organophosphorous compounds in raw commodities detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry technics; halogenated compounds in dairy products detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry technics; carbamates in dairy products detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry technics; halogenated compounds in feed products detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry technics; organophosphorous compounds in feed products detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry technics; carbamates in feed products detected by either gas chromatography, high pressure liquid chromatography, or liquid chromatography/mass spectrophotometry technics.~~

~~(w) Field of Testing 23 consists of the subgroup members appropriate to the Field of Testing stated by the laboratory, pursuant to Section 64805(b)(a).~~

## PROPOSED REGULATIONS

### Article 6. ~~Required Test Method~~ Fields-of-testing

#### Section 64811. Fields-of-testing.

(a) The fields-of-testing in H&SC 100860.1(a) are specified, beginning with section 64811.3 for State certification, and shall include the analyte, group-of-analytes, species, or matrix with the method for which the certificate is to be issued. Prior to the site visit, the laboratory shall notify the department of the method with the analyte, group-of-analytes, species, or matrix in compliance with section 64811(b) for each field-of-testing desired.

(b) A laboratory shall use only the method for which it is certified and which is specified, beginning with section 64811.3(b), for the analyte, group-of-analytes, species, or matrix that is applicable for analysis by the cited method, as Federal or State required for testing of environmental samples for regulatory purposes.

(c) Laboratories, certified for the fields-of-testing involving drinking water and utilizing alternate test procedures (ATP) for Federal regulated analytes or group-of-analytes, shall be in compliance with the Code of Federal Regulations, July 1, 2002, volume 40, part 141.27, and shall be in possession of a document from the U.S. Environmental Protection Agency that shows approval for use of the procedures prior to their use on environmental samples for regulatory purposes. Laboratories testing for analytes or group-of-analytes that are not Federal regulated but are monitored by the State, shall utilize methods designated by the State as specified for the fields-of-testing involving drinking water analyses beginning with section 64811.3.

(d) Laboratories, certified for fields-of-testing involving wastewater and utilizing alternate test procedures (ATP) for Federal regulated analytes, group-of-analytes, or species, shall be in compliance with the Code of Federal Regulations, July 1, 2002, volume 40, part 136.4, and shall be in possession of a document from the U.S. Environmental Protection Agency that shows approval for use of the procedures prior to their use on environmental samples for regulatory purposes. Laboratories testing for analytes, or group-of-analytes, or with species that are not Federal regulated but are monitored by the State, shall utilize methods designated by the State as specified for the fields-of-testing involving wastewater analyses beginning with section 64811.21.

(e) Laboratories, certified for hazardous waste fields-of-testing and utilizing alternate test procedures (ATP) for Federal or State regulated analytes or group-of-analytes, shall be in compliance with the California Code of Regulations, Title 22, sections 66260.21(a) and 66260.21(b), and shall have been granted a variance by the California State Department of Toxic Substances Control, Hazardous Materials Laboratory Branch (HML) for the procedures prior to their use on environmental samples for regulatory purposes.

(f) For Proposition 65, each laboratory shall comply with requirements set by the Office of Environmental Health Hazard Assessment (OEHHA). For each analyte, group-of-analytes, species, or matrix affected by Proposition 65, the laboratory shall perform necessary analyses based on its certificate and applicable field-of-testing for the matrix of the sample.

(g) The methods cited in this article in tables 2, 6, 10, 14, 18, 22, 26, 30, 34, 38, 42, 46, 50, 54, 58, 61, 66, 70, 74, 78, 82, 86, 90, 94, 98, and 102 are hereby incorporated by reference.

Note: authority cited: ~~Section 208, 1011, and 1012,~~ 100275 and 100835(a), Health and Safety Code. Reference: ~~Sections 1012, 1017 and 28503~~ 100850(a) and 100860.1, Health and Safety Code.

### Section 64811.3. Microbiology of Drinking Water Field-of-testing

(a) Microbiology of drinking water field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in Table 1 (Microbiology of Drinking Water Analyte/Group-of-Analytes References) below. Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.3(b).

(b) Laboratories certified for microbiology of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications cited in Table 2 (Microbiology of Drinking Water Method References) of this section. In addition to the methods requirement, the following conditions apply: a laboratory certified for a method of detecting the presence or absence of drinking water total Coliform shall be certified for the method of detecting the presence or absence of drinking water fecal Coliform or E. coli, in order to be in compliance with the Federal Total Coliform Rule that appears in the Code of Federal Regulations, "Protection of Environment", July 01, 2002, volume 40, part 141.21(f).

Table 1 Microbiology of Drinking Water Analyte/Group-of-Analytes References

	Analyte/Group-of-Analytes
drinking water micro-organisms	California Code of Regulations, Title 22, section 64423.1(b)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.21(e), 141.21(f)(3), 141.52
	micro-organisms that appear in the methods cited in table 2 for drinking water micro-organisms
surface water or source water micro-organisms	California Health & Safety Code 116360
	Code of Federal Regulations, "Protection of Environment", July 1, 2000, volume 40, part 141.143(a)(1)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C)(3) tables 2 & 3
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.52 & 141.74(a)(1)
	micro-organisms that appear in the methods cited in table 2 for surface water or source water micro-organisms

Table 2 Microbiology of Drinking Water Method References

	Methods
drinking water micro-organisms	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.21(f)
	Federal Register, "Environmental Protection Agency", October 23, 2002, volume 67, no. 205, p. 65246, part 141.21(f)
surface water or source water micro-organisms	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.74(a)
	Federal Register, "Environmental Protection Agency", October 29, 2002, volume 67, no.209, p. 65901, 141.74

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.6. Inorganic Chemistry of Drinking Water Field-of-testing

(a) Inorganic chemistry of drinking water field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in Table 5 (Inorganic Chemistry of Drinking Water Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.6(b).

(b) Laboratories certified for inorganic chemistry of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 6 (Inorganic Chemistry of Drinking Water Method) of this section.

Table 5 Inorganic Chemistry of Drinking Water Analyte/Group-of-Analytes References

	Analyte/Group-of-Analytes
inorganic compounds, physical properties	California Code of Regulations, Title 22, section 64431, table 64431A
	California Code of Regulations, Title 22, section 64432, table 64432A
	California Code of Regulations, Title 22, section 64449, tables 64449A and 64449B
	California Code of Regulations, Title 22, section 64450, table 64450
	Code of Federal Regulations, "Protection of Environment", July 1, 2000, volume 40, part 141.142(b), table 7
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.23(k)(1)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C)(3), table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C)(4), table 2
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.53, 141.54, 141.74(a)(2), & 143.4(b)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.131(b) & 141.131(c)

	inorganic compounds and physical properties that appear in the methods cited in Table 6
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Table 6 Inorganic Chemistry of Drinking Water Method References

	Method
inorganic compounds, physical properties	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.23(k)(1)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C)(3), table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C)(4), table 2
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.74(a)(2), 141.131, & 143.4(b)
	Federal Register, "Environmental Protection Agency", October 23, 2002, volume 67, number 205, page 65247, 141.23(k)(1)
	Federal Register, "Environmental Protection Agency", October 23, 2002, volume 67, number 205, page 65252, 143.4(b)
	Federal Register, "Environmental Protection Agency", October 29, 2002, volume 67, number 209, page 65897, 143.23(k)(1)
MBAS (methylene blue active substances)	Standard Methods, APHA, AWWA, & WPCF, 18 <sup>th</sup> (1992), 19 <sup>th</sup> (1995), & 20 <sup>th</sup> (1998) editions, method 5540C
potassium	Standard Methods, APHA, AWWA, & WPCF, 18 <sup>th</sup> (1992) & 19 <sup>th</sup> (1995) editions, method 3500-K D
	Standard Methods, APHA, AWWA, & WPCF, 20 <sup>th</sup> (1998) edition, method 3500-K B

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.9. Toxic Chemical Elements of Drinking Water Field-of-testing

(a) Toxic chemical elements of drinking water field-of-testing shall include Federal regulated or State monitored analytes that appear in the publications referenced in Table 59(Toxic Chemical Elements of Drinking Water Analyte/Group-of-analytes References)of this section. Each analyte shall be associated with an applicable method as specified in section 64811.9(b).

(b) Laboratories certified for toxic chemical elements of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 10 (Toxic Chemical Elements of Drinking Water Method References) of this section.

Table 9 Toxic Chemical Elements of Drinking Water Analyte References

	Analyte
metals	California Code of Regulations, Title 22, section 64431, table 64431A
	California Code of Regulations, Title 22, section 64432, table 64432A
	California Code of Regulations, Title 22, section 64449, tables 64449A & 64449B
	California Code of Regulations, Title 22, section 64450, table 64450
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.23(k)(1) & 143.4(b)
	toxic chemical elements that appear in the methods cited in Table 10

Table 10 Toxic Chemical Elements of Drinking Water Method References

	Methods
metals	Code of Federal Regulations, July 1, 2002, volume 40, 141.23(k)(1) & 143.4(b)
	Federal Register, "Environmental Protection Agency", October 23, 2002, volume 67, number 205, page 65247, 141.23(k)(1)



	Federal Register, "Environmental Protection Agency", October 23, 2002, volume 67, number 205, page 65252, 143.4(b)
asbestos	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.23(k)(1)
boron	Methods for the Determination of Metals in Environmental Samples, U.S. Environmental Protection Agency, May 1994, EPA/600/R-94/111, method 200.8
chromium (VI)	Methods for the Determination of Metals in Environmental Samples, U.S. Environmental Protection Agency, May 1994, EPA/600/R-94/111, method 218.6
vanadium	Methods for the Determination of Metals in Environmental Samples, U.S. Environmental Protection Agency, May 1994, EPA/600/R-94/111, method 200.9

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.12 Volatile Organic Chemistry of Drinking Water Field-of-testing

(a) Volatile organic chemistry of drinking water field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 13 (Volatile Organic Chemistry of Drinking Water Analyte/Group-of-Analytes References) of this section. Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.12(b).

(b) Laboratories certified for volatile organic chemistry of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 14 (Volatile Organic Chemistry of Drinking Water Method References) of this

section.

Table 13 Volatile Organic Chemistry of Drinking Water Analyte/Group-of-Analytes References

	Analyte/Group-of-Analytes
volatile organic compounds	California Code of Regulations, Title 22, 64444, table 64444-A, part (a)
	California Code of Regulations, Title 22, 64445.1, table 64445.1-A, part (a)
	California Code of Regulations, Title 22, 64449, table 64449-A
	California Code of Regulations, Title 22, 64450, table 64450
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.24(e)(1) & 141.131(b)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C)(3), table 1
	volatile organic compounds that appear in the methods cited in table 14

Table 14 Volatile Organic Chemistry of Drinking Water Method References

	Method
volatile organic compounds	Code of Federal Regulations, "Protection of Environment", July 1, 2000, volume 40, part 141.142(b), table 7
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.24(e) & 141.131
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C), table 1
t-amyl methyl ether (TAME), t-butyl alcohol (TBA), ethyl-t-butyl ether (ETBE), dichlorodifluoromethane (Freon 12), trichlorofluoromethane (Freon 11), and 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	Methods for the Determination of Organic Compounds in Drinking Water, U.S. Environmental Protection Agency, August 1995, EPA/600/R-95/131, methods 502.2 and 524.2
1,2,3-trichloropropane	methods 524.2M and 525.2M, California State Department of Health Services, Sanitation & Radiation Laboratory

	Branch, ATTN: Branch Chief
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Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.15. Semi-Volatile Organic Chemistry of Drinking Water Field-of-testing

(a) Semi-volatile organic chemistry of drinking water field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in publications referenced in table 17 (Semi-Volatile Organic Chemistry of Drinking Water Analyte/Group-of-Analytes References) of this section. Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.15(b).

(b) Laboratories certified for semi-volatile organic chemistry of drinking water fields-of-testing shall utilize Federal or State required methods that appear in the publications in table 18 (Semi-Volatile Organic Chemistry of Drinking Water Method References).

Table 17 Semi-Volatile Organic Chemistry of Drinking Water Analyte/Group-of-Analytes References

	Analyte/Group-of-Analytes
semi-volatile organic compounds	California Code of Regulations, Title 22, 64444, table 64444-A, part (b)
	California Code of Regulations, Title 22, 64445.1, table 64445.1-A, part (b)
	California Code of Regulations, Title 22, 64449, table 64449-A

	California Code of Regulations, Title 22, 64450, table 64450
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.24(e)(1), 141.24(h)(13)(ii), 141.24(h)(18), & 141.131(b)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C)(3), table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.142(b), table 7
	semi-volatile organic compounds that appear in the methods cited in table 10

Table 18 Semi-volatile Organic Chemistry of Drinking Water Method References

	Method
semi-volatile organic compounds	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.24(e), 141.24(h)(13)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C), table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.131(a) & 141.131(b)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.142(b) table 7

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.18. Radiochemistry of Drinking Water Field-of-testing

(a) Radiochemistry of drinking water fields-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 21 (Radiochemistry of Drinking Water Analyte/Group-of-analytes

References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.18(b).

(b) Laboratories certified for drinking water radiochemistry fields-of-testing shall utilize Federal or State required methods that appear in the publications in table 22 (Radiochemistry of Drinking Water Method References).

Table 21 Radiochemistry of Drinking Water Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
radionuclides	California Code of Regulations, Title 22, section 64443
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 141.25(a) & 141.25(b)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.40(a)(v)(C)(3), table 1, list 3
	Code of Federal Regulations, "Energy", January 1, 2003, volume 10, part 20.2402 Appendix B

Table 22 Radiochemistry of Drinking Water Method References

	Method
radionuclides	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 141.25(a)
	Radiochemistry Procedures Manual, U.S. Environmental Protection Agency, June 1984, EPA 520/5-84-006, NTIS PB84-215581
	Radiochemical Analytical Procedures for Analysis of Environmental Samples, U.S. Environmental Protection Agency, March 1979, EMSL-LV-0539-17
	Methods for Determination of Radioactive Substances in Water and Fluvial Sediments, U.S. Geological Survey, 1977, book 5, chapter A5
	EML Procedures Manual, U.S. Department of Energy, 1990, 27 <sup>th</sup> edition, volume 1
radon-222	Standard Methods, APHA, AWWA, & WPCF, 1996, 19th edition, supplement, method 7500-Rn
	Standard Methods, APHA, AWWA, & WPCF, 1998, 20th edition, method 7500-Rn B

	Two Test Procedures for Radon in Drinking Water Interlaboratory Collaborative Study, U.S. Environmental Protection Agency, March 1987, EPA/600/2-87/082, p. 22, Appendix D (The Determination of Radon in Drinking Water)
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Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.21. Microbiology of Wastewater Field-of-testing

(a) Microbiology of wastewater field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 25 (Microbiology of Wastewater Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.21(b) for the wastewater microbiology fields-of-testing.

(b) Laboratories certified for microbiology of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications referenced in table 26 (Microbiology of Wastewater Method References).

Table 25 Microbiology of Wastewater Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
wastewater micro-organisms	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a), table 1A
	micro-organisms that appear in the methods cited in table 26

Table 26 Microbiology of Wastewater Method References

	Method
wastewater micro-organisms	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a), table 1A

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.24. Inorganic Chemistry of Wastewater Fields-of-testing

(a) Inorganic chemistry wastewater fields-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 29 (Inorganic Chemistry Wastewater Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.24(b).

(b) Laboratories certified for Inorganic Chemistry of Wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 30 (Inorganic Chemistry of Wastewater Method References).

Table 29 Inorganic Chemistry of Wastewater Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
inorganic compounds, physical properties	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a), table 1B
	inorganic compounds and physical properties that appear in the methods cited in table 30

Table 30 Inorganic Chemistry of Wastewater Method References

	Method
inorganic compounds, physical properties	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a) table 1B
hardness	Code of Federal Regulations, "Protection of Environment", July 1, 2001, volume 40, part 136.3 appendix C
	Standard Methods, APHA, AWWA, & WPCF, 1992, 18th edition, methods 3120B & 3111B
tannin and lignin	Standard Methods, APHA, AWWA, & WPCF, 1992, 18th edition, method 5550B
total recoverable petroleum hydrocarbons	Methods for Chemical Analysis of Water and Wastes, March 1983, EPA-600/4-79-020, method 418.1

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.27. Toxic Chemical Elements of Wastewater Field-of-testing

(a) Toxic chemical elements of wastewater field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 33 (Toxic Chemical Elements of Wastewater Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.27(b).

(b) Laboratories certified for toxic chemical elements of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 34 (Toxic Chemical Elements of Wastewater Method References).



Table 33 Toxic Chemical Elements of Wastewater Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
metals	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 136.3(a), table 1B
	toxic chemical elements that appear in the methods cited in table 34

Table 34 Toxic Chemical Elements of Wastewater Method References

	Method
metals	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a), table 1B
asbestos	Analytical Methods for Determination of Asbestos Fibers in Water, U.S. Environmental Protection Agency, September 1983, EPA-600/4-83-043, method 100.1
	Method 100.2, Determination of Asbestos Structures over 10 um in Length in Drinking Water, U.S. Environmental Protection Agency, June 1994, EPA/600/R-94/134, method 100.2, available through NTIS number PB 83-260471

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.30. Volatile Organic Chemistry of Wastewater Field-of-testing

(a) Volatile organic chemistry of wastewater fields-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 37 (Volatile Organic Chemistry of Wastewater Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be

associated with an applicable method as specified in section 64811.30(b).

(b) Laboratories certified for organic chemistry of wastewater fields-of-testing shall utilize Federal or State required methods that appear in the publications in table 38 (Volatile Organic Chemistry of Wastewater Method References).

Table 37 Volatile Organic Chemistry of Wastewater Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
volatile organic compounds	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a) tables 1C & 1F
	volatile organic compounds that appear in the methods cited in table 38

Table 38 Volatile Organic Chemistry of Wastewater Method References

	Method
volatile organic compounds	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a) tables 1C & 1F

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.33. Semi-volatile Organic Chemistry of Wastewater Field-of-testing

(a) Semi-volatile organic chemistry of wastewater field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 41 (Semi-volatile Organic Chemistry of Wastewater

Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method(s) as specified in section 64811.33(b).

(b) Laboratories certified for semi-volatile organic chemistry of wastewater fields-of-testing shall utilize Federal or State required methods that appear in the publications in table 42 (Semi-volatile Organic Chemistry of Wastewater Method References).

Table 41 Semi-volatile Organic Chemistry of Wastewater Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
semi-volatile organic compounds	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 136.3(a) tables 1C, 1D, & 1F semi-volatile organic compounds that appear in the methods cited in table 42

Table 42 Semi-volatile Organic Chemistry of Wastewater Method References

	Method
semi-volatile organic compounds	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a) tables 1C, 1D, & 1F
adipates	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.5, appendix A, method 625 Standard Methods, APHA, AWWA, & WPCF, 18 <sup>th</sup> (1992), 19 <sup>th</sup> (1995), & 20 <sup>th</sup> (1998) editions, method 6410 B
benzidines	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.5, appendix A, method 605
carbamates	The Determination of Carbamates and Urea Pesticides in Industrial and Municipal Wastewater, U.S. Environmental Protection Agency, method 632, available through California State Department of Health Services, Environmental Laboratory Accreditation Program, ATTN: Duty Officer
oil & grease	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a) table 1B, methods 413.1, 1664, & 5520 B
total organic carbon	Code of Federal Regulations, "Protection of Environment",

	July 1, 2002, volume 40, part 136.3(a) table 1B, methods 415.1, 5310 B, 5310 C, 5310 D, D2579-93, 973.47, & p.14
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Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.36. Radiochemistry of Wastewater Field-of-testing

(a) Radiochemistry of wastewater field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 45 (Radiochemistry of Wastewater Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.36(b).

(b) Laboratories certified for radiochemistry of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications referenced in table 46 (Radiochemistry of Wastewater Method References).

Table 45 Radiochemistry of Wastewater Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
radionuclides	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a) table 1E
	Code of Federal Regulations, "Energy", January 1, 2003, volume 10, part 20.2402 Appendix B

Table 46 Radiochemistry of Wastewater Method References

	Method
radionuclides	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, 136.3(a) table 1E
radionuclides, excluding gross alpha, gross beta, total radium, radium-226	Prescribed Procedures for Measurement of Radioactivity in Drinking Water, U.S. Environmental Protection Agency, August 1980, EPA-600/4-80-032, available through NTIS number PB 80-224744
	Radiochemistry Procedures Manual, U.S. Environmental Protection Agency, December 1987, EPA-520/5-84-006, available through NTIS number PB 84-215581
	Radiochemical Analytical Procedures for Analysis of Environmental Samples, U.S. Environmental Protection Agency, March 1979, available through NTIS number EMSL-LV-0539-17
	Methods for Determination of Radioactive Substances in Water and Fluvial Sediments, U.S. Geological Survey, 1997, Book 5, Chapter A5, available through U.S. Geological Survey, Denver, CO
	EML Procedures Manual, U.S. Department of Energy, 27 <sup>th</sup> (1990) edition, volume 1, and 28 <sup>th</sup> (1997) edition, volumes 1 & 2, available through Environmental Measurements Laboratory, U.S. Department of Energy, New York, NY
uranium	Standard Methods, APHA, AWWA, & WPCF, 18 <sup>th</sup> (1992), 19 <sup>th</sup> (1995), & 20 <sup>th</sup> (1998) editions, method 7500-U C

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.39. Whole Effluent Toxicity of Wastewater Field-of-testing

(a) Whole effluent toxicity of wastewater field-of-testing shall include Federal regulated or State monitored species that appear in the publications referenced in table 53 (Whole Effluent Toxicity of Wastewater Species References). Each species shall be associated with an applicable method as specified in section 64811.39(b).

(b) Laboratories certified for whole effluent toxicity of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications referenced in table 54 (Whole Effluent Toxicity of Wastewater Method References).

Table 53 Whole Effluent Toxicity of Wastewater Species References

	Species
aquatic organisms	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 136.3(a), table 1A
	Federal Register, "Environmental Protection Agency", November 19, 2002, volume 67, no. 223, p. 69972, part 136.3(a), table 1A
	aquatic organisms that appear in the methods cited in table 54

Table 54 Whole Effluent Toxicity of Wastewater Method References

	Method
aquatic organisms	Code of Federal Regulations, "Protection of Environment", July 1, 2001, volume 40, 136.3(a) table 1A
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, 136.3(a) table 1A
	Federal Register, "Environmental Protection Agency", November 19, 2002, volume 67, no. 223, p. 69972, part 136.3(a), table 1A
	Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, U.S. Environmental Protection Agency, March 1985, EPA/600/4-85/013
	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, U.S. Environmental Protection Agency, March 1989, EPA/600/4-89/001
	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, U.S. Environmental Protection Agency, May 1988, EPA-600/4-87/028

	Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms, U.S. Environmental Protection Agency, August 1995, EPA/600/R-95/136
excluding aquatic organisms in 40 CFR 136.3	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, U.S. Environmental Protection Agency, June 1994, EPA/600/R-94/024
	Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods, U.S. Environmental Protection Agency, June 1994, EPA/600/R-94/025
	Procedures Manual for Conducting Toxicity Tests Developed by the Marine Bioassay Project, State Water Resources Control Board, California Environmental Protection Agency, January 1996, 96-1WQ
	Static Acute Bioassay Procedures for Hazardous Waste Samples, California Department of Fish and Game, Water Pollution Control Laboratory, November 1988
	Standard Guide for Conducting Static Acute Toxicity Tests Starting with Embryos of Four Species of Saltwater Bivalve Molluscs, American Society for Testing & Materials, Philadelphia, PA, E 724-89, 1994, method ASTM E724-94
	Standard Guide for Conducting Static 96-h Toxicity Tests with Microalgae, American Society for Testing & Materials, Philadelphia, PA, E 1218-90, 1990, method ASTM E1218-90

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.42. Inorganic Chemistry and Toxic Chemical Elements of Hazardous Waste

##### Field-of-Testing

(a) Inorganic chemistry and toxic chemical elements of hazardous waste field-of-testing shall include Federal regulated or State monitored analytes and groups-of-

analytes that appear in the publications referenced in table 57 (Inorganic Chemistry and Toxic Chemical Elements of Hazardous Waste Analyte/Group-of-analytes References).  
Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.42(b).

(b) Laboratories certified for inorganic chemistry and toxic chemical elements of hazardous waste field-of-testing shall utilize State required methods that appear in the publication referenced in table 58 (Inorganic Chemistry and Toxic Chemical Elements of Hazardous Waste Method References).

Table 57 Inorganic Chemistry and Toxic Chemical Elements of Hazardous Waste Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
inorganic chemical compounds, metals	California Code of Regulations, Title 22, sections 66261.24(a)(1)(B), 66261.24(a)(2)(A), 66261.33(e), 66261.33(f), & 66261.113(b)
	California Code of Regulations, Title 22, section 66261.126, appendices VII, VIII, & X
	California Code of Regulations, Title 22, section 66264.801, Appendix IX
	California Code of Regulations, Title 22, section 66265.714, Appendix VI
	California Code of Regulations, Title 22, sections 66268.10(b)(3), 66268.40, & 66268.48
	California Code of Regulations, Title 22, section 66268.106(a), tables I-A, I-B, I-D & I-E
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261.3(c)(2)(ii)(C)(1)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261.24(a) table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 261.33(e) & 261.33(f)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261.38(a) table 1



	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261, appendices VII, VIII & IX
	inorganic chemical compounds and metals that appear in the methods cited in table 57

Table 58 Inorganic Chemistry and Toxic Chemical Elements of Hazardous Waste Method References

	Method
inorganic chemical compounds, metals	California Code of Regulations, Title 22, section 66261.126 appendix III
organic lead	California Code of Regulations, Title 22, section 66261.126 appendix XI (known as method 938-M)
	HML Method 939-M, California Department of Toxic Substances Control, Hazardous Materials Laboratory (HML), available through HML
reactivity	California Code of Regulations, Title 22, section 66261.23

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.45. Extraction Test of Hazardous Waste Field-of-testing

(a) Extraction test of hazardous waste field-of-testing shall include Federal regulated or State monitored procedures that appear in table 61 (Extraction Test of Hazardous Waste References).

(b) Laboratories certified for extraction test of hazardous waste field-of-testing shall utilize State required methods that appear in the publications referenced in table 61.

Table 61 Extraction Test of Hazardous Waste References

	Method
extraction procedures	California Code of Regulations, Title 22, section 66261.126 appendix III
waste extraction test (WET)	California Code of Regulations, Title 22, section 66261.126 appendix II

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.48. Volatile Organic Chemistry of Hazardous Waste Field-of-testing

(a) The volatile organic chemistry of hazardous waste field-of-testing shall be Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 65 (Volatile Organic Chemistry of Hazardous Waste Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.48(b).

(b) Laboratories certified for volatile organic chemistry of hazardous waste field-of-testing shall utilize State required methods that appear in the publications referenced in table 66 (Volatile Organic Chemistry of Hazardous Waste Method References).

Table 65 Volatile Organic Chemistry of Hazardous Waste Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
volatile organic compounds	California Code of Regulations, Title 22, sections 66261.24(a)(1)(B), 66261.24(a)(2)(B), 66261.33(e) , 66261.33(f), 66261.113(b)

	California Code of Regulations, Title 22, section 66261.126 Appendix VII, VIII & X
	California Code of Regulations, Title 22, section 66264.801 Appendix IX
	California Code of Regulations, Title 22, section 66265.714 Appendix VI
	California Code of Regulations, Title 22, sections 66268.40 & 66268.48
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261.24(a) table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261.33(e), & 261.33(f)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261.38(a) table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261 appendices VII, VIII, IX
	volatile organic compounds that appear in the methods cited in table 66

Table 66 Volatile Organic Chemistry of Hazardous Waste Method References

	Method
volatile organic compounds	California Code of Regulations, Title 22, section 66261.126 appendix III
gasoline	Leaking Underground Fuel Tank Field Manual, Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, (LUFT manual), State of California Leaking Underground Fuel Tank Task Force, Department of Toxic Substances Control, October 1989

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.51. Semi-volatile Organic Chemistry of Hazardous Waste Field-of-testing

(a) The semi-volatile organic chemistry of hazardous waste field-of-testing shall be

Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 69 ( Semi-volatile Organic Chemistry of Hazardous Waste Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.51(b).

(b) Laboratories certified for semi-volatile organic chemistry of hazardous waste field-of- testing shall utilize State required methods that appear in the publications referenced in table 70 (Semi-volatile Organic Chemistry of Hazardous Waste Method References).

Table 69 Semi-volatile Organic Chemistry of Hazardous Waste Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
semi-volatile organic compounds	California Code of Regulations, Title 22, sections 66261.24(a)(1)(B), 66261.24(a)(2)(B), 66261.33(e), 66261.33(e), 66261.113(b)
	California Code of Regulations, Title 22, section 66261.126 Appendix VII, VIII, X
	California Code of Regulations, Title 22, section 66264.801 Appendix IX
	California Code of Regulations, Title 22, section 66265.714 Appendix VI
	California Code of Regulations, Title 22, sections 66268.40 & 66268.48
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261.24(a) table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, parts 261.33(e), 261.33(f)
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261.38(a) table 1
	Code of Federal Regulations, "Protection of Environment", July 1, 2002, volume 40, part 261 appendices VII, VIII & IX
	semi-volatile organic compounds that appear in the methods cited in table 70

Table 70 Semi-volatile Organic Chemistry of Hazardous Waste Method References

	Method
semi-volatile organic compounds	California Code of Regulations, Title 22, section 66261.126 appendix III
diesel	Leaking Underground Fuel Tank Field Manual, Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure, (LUFT manual), State of California Leaking Underground Fuel Tank Task Force, Department of Toxic Substances Control, October 1989

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.54. Radiochemistry of Hazardous Waste Field-of-testing

(a) Radiochemistry of hazardous waste field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 73 (Radiochemistry of Hazardous Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.54(b) for the hazardous waste radiochemistry fields-of-testing.

(b) Laboratories certified for radiochemistry of hazardous waste field-of-testing shall utilize State required methods that appear in the publications referenced in table 74 (Radiochemistry of Hazardous Method References).

Table 73 Radiochemistry of Hazardous Waste Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
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radionuclides	Code of Federal Regulations, "Energy", January 1, 2003, volume 10, part 20.2402 Appendix B
gamma fission products	Sample Preparation and Analysis, U.S. Department of Energy, August 1998, available through California Department of Health Services, Environmental Management Branch

Table 74 Radiochemistry of Hazardous Waste Method References

	Method
radionuclides	California Code of Regulations, Title 22, section 66261.126 appendix III
radionuclides, excluding gross alpha/beta, total alpha radium & radium-228 in aqueous matrices	Prescribed Procedures for Measurement of Radioactivity in Drinking Water, U.S. Environmental Protection Agency, August 1980, EPA-600/4-80-032, available through NTIS number PB 80-224744
	Radiochemistry Procedures Manual, U.S. Environmental Protection Agency, June 1984, EPA-520/5-84-006, available through NTIS number PB 84-215581
	Radiochemical Analytical Procedures for Analysis of Environmental Samples, U.S. Environmental Protection Agency, March 1979, available through NTIS number EMSL-LV-0539-17
	Methods for Determination of Radioactive Substances in Water and Fluvial Sediments, U.S. Geological Survey, 1997, Book 5, Chapter A5, available through U.S. Geological Survey, Denver, CO
	EML Procedures Manual, U.S. Department of Energy, 27 <sup>th</sup> (1990) edition, volume 1, and 28 <sup>th</sup> (1997), volumes 1 & 2, available through Environmental Measurements Laboratory, U.S. Department of Energy, New York, NY
gamma fission products (screen)	EML Procedures Manual, U.S. Department of Energy, 1997, 28th edition, volume 1, method Ga-01-R, with "Sample Preparation and Analysis", U.S. Department of Energy, August 1998, available through California Department of Health Services, Environmental Management Branch

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.57. Toxicity Bioassay of Hazardous Waste Field-of-testing

(a) Toxicity bioassay of Hazardous waste field-of-testing shall include Federal regulated or State monitored species that appear in the publications referenced in table 77 (Toxicity Bioassay of Hazardous Waste Species References). Each species shall be associated with an applicable method(s) as specified in section 64811.57(b).

(b) Laboratories certified for toxicity bioassay of hazardous waste fields-of-testing shall utilize State required methods that appear in the publications referenced in table 78 (Toxicity Bioassay of Hazardous Waste Method References).

Table 77 Toxicity Bioassay of Hazardous Waste Species References

	Species
aquatic organisms	California Code of Regulations, Title 22, section 66261.24(a)(6)
	aquatic organisms that appear in the methods cited in table 78

Table 78 Toxicity Bioassay of Hazardous Waste Method References

	Method
aquatic organisms	California Code of Regulations, Title 22, section 66261.24(a)(6)
excluding aquatic organisms in 22CCR 66261.24(a)(6)	Methods for Measuring the Toxicity and Bioaccumulation of Sediment-associated Contaminants with Freshwater Invertebrates, U.S. Environmental Protection Agency, June 1994, EPA/600/R-94/024
	Methods for Assessing the Toxicity of Sediment-associated Contaminants with Estuarine and Marine Amphipods, U.S. Environmental Protection Agency, June 1994, EPA/600/R-94/025

	Static Acute Bioassay Procedures for Hazardous Waste Samples, California Department of Fish & Game, Water Pollution Control Laboratory, November 1988
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Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.60. Physical Properties of Hazardous Waste Field-of-testing

(a) Physical properties of hazardous waste field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 81 (Physical Properties of Hazardous Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.54(b).

(b) Laboratories certified for physical properties of hazardous waste field-of-testing shall utilize State required methods that appear in the publications referenced in table 82 (Physical Properties of Hazardous Method References).

Table 81 Physical Properties of Hazardous Waste Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
physical properties	California Code of Regulations, Title 22, section, 66261.20, 66261.21, 66261.22 & 66261.23

Table 82 Physical Properties of Hazardous Waste Method References



	Method
physical properties	California Code of Regulations, Title 22, section 66261.126 Appendix III

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

#### 64811.63. Bulk Asbestos Analysis of Hazardous Waste Field-of-testing

(a) Bulk asbestos analysis of hazardous waste field-of-testing shall include Federal regulated or State monitored analyte and group-of-analytes that appear in the publications referenced in table 85 (Bulk Asbestos Analysis of Hazardous Waste Analyte/Group-of-analytes References). California Code of Regulations, Title 22, sections 66261.24(a)(1)(A). Each analyte or group-of-analytes shall be associated with an applicable method(s) as specified in section 64811.63(b) for the hazardous waste asbestos fields-of-testing.

(b) Laboratories certified for bulk asbestos analysis of hazardous waste field-of-testing shall utilize State required methods that appear in the publications referenced in table 86 (Bulk Asbestos Analysis of Hazardous Waste Method References).

#### Table 85 Bulk Asbestos Analysis of Hazardous Waste Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
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asbestos	Interim Method for the Determination of Asbestos in Bulk Insulation Samples, U.S. Environmental Protection Agency, December 1982, EPA-600/M4-82-020, available through NTIS
	Asbestos: Geology, Mineralogy, Mining and Uses, U.S. Department of the Interior, U.S. Geological Survey, 2002, OF02-149, version 1.0, tables 1 & 2

Table 86 Bulk Asbestos Analysis of Hazardous Waste Method References

	Method
asbestos	Interim Method for the Determination of Asbestos in Bulk Insulation Samples, U.S. Environmental Protection Agency, December 1982, EPA-600/M4-82-020, available through NTIS

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.66. Microbiology of Food Field-of-testing (Environmental)

(a) Microbiology of food field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 89 (Microbiology of Food Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.66(b) for the microbiology of food field-of-testing.

(b) Laboratories certified for microbiology of food field-of-testing shall utilize State required methods that appear in the publications referenced in table 90 (Microbiology of Food Method References).

Table 89 Microbiology of Food Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
micro-organisms	Code of Federal Regulations, "Protection of Environment", July 1, 2000, volume 40, parts 180 through 180.1217
	Foodborne Pathogenic Microorganisms and Natural Toxins Handbook, U.S. Food & Drug Administration, Centers for Disease Control & Prevention, U.S. Department of Agriculture Food Safety Inspection Service, National Institutes of Health, 1993

Table 90 Microbiology of Food Method References

	Method
micro-organisms	Bacteriological Analytical Manual, Food & Drug Administration, 1995, 8th edition
	Compendium of Methods for the Microbiological Examination of Foods, American Public Health Association, 4th edition
	Official Methods of Analysis, William Horwitz (ed), 2000, 17th edition
	Compendium of Analytical Methods, Health & Welfare Canada, Health Protection Branch, January 2002, volume 1
	Compendium of Analytical Methods, Health & Welfare Canada, Health Protection Branch, January 2002, volume 2
	Compendium of Analytical Methods, Health & Welfare Canada, Health Protection Branch, January 2002, volume 3
	Compendium of Analytical Methods, Health & Welfare Canada, Health Protection Branch, April 1999, volume 4

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.69. Organic Chemistry of Pesticide Residue in Food (Measurements by MS Techniques) Field-of-testing

(a) Organic chemistry of pesticide residue in food (measurements by MS techniques) field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 93 (Organic Chemistry of Pesticide Residue in Food Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.69(b).

(b) Laboratories certified for organic chemistry of pesticide residue in food (measurements by MS techniques) field-of-testing shall utilize State required methods that appear in the publications referenced in table 94 (Organic Chemistry of Pesticide Residue in Food Method References).

Table 93 Organic Chemistry of Pesticide Residue in Food Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
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organic compounds	Code of Federal Regulations, July 1, 2002, volume 40, parts 180 through 180.1210
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Table 94 Organic Chemistry of Pesticide Residue in Food Method References

	Method
organic compounds	Pesticide Analytical Manual, 1992, volumes I and II, U.S. Department of Health & Human Services, Public Health Service, U.S. Food and Drug Administration, 2905A;
	CDFA Multi-Residue Pesticide Screening Method, California Department of Food and Agriculture, Center for Analytical Chemistry
	Journal of Agricultural and Food Chemistry, 1991, volume 39, number 9, page 1658, "Solid-Phase Extraction Cleanup of Halogenated Organic Pesticides"
	Bulletin of Environmental Contamination and Toxicology, 1984, volume 33, page 538, "High Performance Liquid Chromatographic Methods for Determination of n-Methyl Carbamates in Fruits and Vegetables"
	Official Methods of Analysis of AOAC International, 2000, 17th edition, section 10
	Action Levels for Poisonous or Deleterious Substances in Human Food and Animal Feed, U.S. Food and Drug Administration, Industry Activities Staff (HFS-565) CFSAN/FDA
	Food Testing and Analysis, April/May 2000, volume 6, page 2, "The Basic Concepts of Pesticide Residue Analyses in Food Crops"
	Journal of Chromatography, 1995, volume 690, pages 455, "Off-line High Performance Liquid Chromatography and Solid Phase Extraction Clean-up for Confirmation of Pesticide Residues in Fresh Produce by Gas Chromatography Mass Spectroscopy"
	Journal of AOAC, 1991, volume 74, page 6, "GC-MIP-AED Method for Pesticide Residue Determination in Fruits and Vegetables"

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.72. Organic Chemistry of Pesticide Residue in Food (Excluding Measurements by MS Techniques) Field-of-testing

(a) Organic chemistry of pesticide residue in food (excluding measurements by MS techniques) field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 93 (Organic Chemistry of Pesticide Residue in Food Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method(s) as specified in section 64811.72(b) for the food organic chemistry fields-of-testing

(b) Laboratories certified for organic chemistry of pesticide residue in food (excluding measurements by MS techniques) fields-of-testing shall utilize State required methods that appear in the publications referenced in table 94 (Organic Chemistry of Pesticide Residue in Food Method References).

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.75. Microbiology of Recreational Water Field-of-testing

(a) Microbiology of recreational water field-of-testing shall include Federal regulated or State monitored analytes and groups-of-analytes that appear in the publications referenced in table 97 (Microbiology of Recreational Water Analyte/Group-of-analytes References). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.75(b).

(b) Laboratories certified for recreational waters microbiology fields-of-testing shall utilize State required methods that appear in the publications referenced in table 98 (Microbiology of Recreational Water Method References).

Table 97 Microbiology of Recreational Water Analyte/Group-of-analytes References

	Analyte/Group-of-analytes
micro-organisms	Federal Register, August 30, 2001, volume 66, number 169, table 1A
	Health & Safety Code 115880(c)(2)

Table 98 Microbiology of Recreational Water Method References

	Method
micro-organisms	Federal Register, August 30, 2001, volume 66, number 169, table 1A

Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

64811.78. Shellfish Sanitation Field-of-testing

(a) Shellfish sanitation field-of-testing shall include Federal regulated or State monitored matrices or group-of-analytes that appear in the publications referenced in table 101 (Shellfish Sanitation Matrix/Group-of-analytes References). shellfish meat; paralytic shellfish poison; shellfish growing waters. Each matrix or group-of-analytes shall be associated with an applicable method as specified in section 64811.78(b).

(b) Laboratories certified for shellfish sanitation field-of-testing shall utilize State required methods that appear in the publications referenced in table 102 (Shellfish Sanitation Method References).

Table 101 Shellfish Sanitation Matrix/Group-of-analytes References

	Analyte/Group-of-analytes
micro-organisms, meat, shellfish growing waters	Recommended Procedures for the Examination of Sea Water and Shellfish, American Public Health Association, 1970, 4th edition
	Foodborne Pathogenic Microorganisms and Natural Toxins Handbook, U.S. Food & Drug Administration,

Table 102 Shellfish Sanitation Method References

	Method
micro-organisms, meat, shellfish growing waters	Recommended Procedures for the Examination of Sea Water and Shellfish, American Public Health Association, 1970, 4th edition
	Official Methods of Analyses of the Association of Official Analytical Chemists, AOAC, 15 <sup>th</sup> edition (1990), & 17 <sup>th</sup> edition (2000), volume 1, chapter 17, method 978.23
	Microbiological Methods for Monitoring the Environment, Water and Wastes, U.S. Environmental Protection Agency, 1978, EPA/600/8/78/017



Note: authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100860.1, Health and Safety Code.

## Article 16. National Environmental Laboratory Accreditation Program (NELAP)

### Section 64880. Fields-of-testing/Fields-of-accreditation

(a) The fields-of-testing (also known as fields-of-accreditation) in H&SC 100862(a) are specified, beginning with section 64880.3 for NELAP accreditation, and shall include the analyte, group-of-analytes, species, or matrix with the method for which the certificate is to be issued. Prior to the site visit, the laboratory shall notify the department of the method with the analyte, group-of-analytes, species, or matrix in compliance with section 64880(b) for each field-of-testing desired.

(b) A laboratory shall use only the method which appears on its certificate and which is specified, beginning with section 64880.3(b), for the analyte, group-of-analytes, species, or matrix that is applicable for analysis by the cited method, as Federal or State required for testing of environmental samples for regulatory purposes.

(c) Laboratories, accredited for the fields-of-testing involving drinking water and utilizing alternate test procedures (ATP) for Federal regulated analytes or group-of-analytes, shall be in compliance with the Code of Federal Regulations, July 1, 2002, volume 40, part 141.27, and shall be in possession of a document from the U.S. Environmental Protection Agency that shows approval for use of the procedures prior to their use on environmental samples for regulatory purposes. Laboratories testing for analytes or group-of-analytes that are not Federal regulated but are monitored by the State, shall utilize methods designated by the State as specified for the fields-of-testing involving drinking water analyses beginning with section 64880.3.

(d) Laboratories, certified for fields-of-testing involving wastewater and utilizing alternate test procedures (ATP) for Federal regulated analytes, group-of-analytes, or species, shall be in compliance with the Code of Federal Regulations, July 1, 2002, volume

40, part 136.4, and shall be in possession of a document from the U.S. Environmental Protection Agency that shows approval for use of the procedures prior to their use on environmental samples for regulatory purposes. Laboratories testing for analytes, or group-of-analytes, or with species that are not Federal regulated but are monitored by the State, shall utilize methods designated by the State as specified for the fields-of-testing involving wastewater analyses beginning with section 64880.21.

(e) Laboratories, certified for hazardous waste fields-of-testing and utilizing alternate test procedures (ATP) for Federal or State regulated analytes or group-of-analytes, shall be in compliance with the California Code of Regulations, Title 22, sections 66260.21(a) and 66260.21(b), and shall have been granted a variance by the California State Department of Toxic Substances Control, Hazardous Materials Laboratory Branch (HML) for the procedures prior to their use on environmental samples for regulatory purposes.

(f) For Proposition 65, each laboratory shall comply with requirements set by the Office of Environmental Health Hazard Assessment (OEHHA). For each analyte, group-of-analytes, species, or matrix affected by Proposition 65, the laboratory shall perform necessary analyses based on its certificate and applicable field-of-testing for the matrix of the sample.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.3. Microbiology of Drinking Water Field-of-testing

(a) Microbiology of drinking water field-of-testing shall be as specified in section 64811.3(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.3(b).

(b) Laboratories accredited for microbiology of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 2 of section 64811.3 and be in compliance with section 64811.3.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.6. Inorganic Chemistry of Drinking Water Field-of-testing

(a) Inorganic chemistry of drinking water field-of-testing shall be as specified in section 64811.6(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.6(b).

(b) Laboratories accredited for Inorganic chemistry of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 6 of section 64811.6 and be in compliance with section 64811.6.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.9. Toxic Chemical Elements of Drinking Water Field-of-testing

(a) Toxic chemical elements of drinking water field-of-testing shall be as specified in section 64811.9(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.9(b).

(b) Laboratories accredited for toxic chemical elements of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 10 of section 64811.9 and be in compliance with section 64811.9.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.12. Volatile Organic Chemistry of Drinking Water Field-of-testing

(a) Volatile organic chemistry of drinking water field-of-testing shall be as specified in section 64811.12(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.12(b).

(b) Laboratories accredited for volatile organic chemistry of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 14 of section 64811.12 and be in compliance with section 64811.12.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.15. Semi-volatile Organic Chemistry of Drinking Water Field-of-testing

(a) Semi-volatile organic chemistry of drinking water field-of-testing shall be as specified in section 64811.15(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.15(b).

(b) Laboratories accredited for semi-volatile organic chemistry of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 18 of section 64811.15 and be in compliance with section 64811.15.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.18. Radiochemistry of Drinking Water Field-of-testing

(a) Radiochemistry of drinking water field-of-testing shall be as specified in section 64811.18(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.18(b).

(b) Laboratories accredited for radiochemistry of drinking water field-of-testing shall utilize Federal or State required methods that appear in the publications in table 22 of section 64811.18 and be in compliance with section 64811.18.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

#### Section 64880.21. Microbiology of Wastewater Field-of-testing

(a) Microbiology of wastewater field-of-testing shall be as specified in section 64811.21(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.21(b).

(b) Laboratories accredited for microbiology of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 26 of section 64811.21 and be in compliance with section 64811.21.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.24. Inorganic Chemistry of Wastewater Field-of-testing

(a) Inorganic chemistry of wastewater field-of-testing shall be as specified in section 64811.24(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.24(b).

(b) Laboratories accredited for inorganic chemistry of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 30 of section 64811.24 and be in compliance with section 64811.24.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.27. Toxic Chemical Elements of Wastewater Field-of-testing

(a) Toxic chemical elements of wastewater field-of-testing shall be as specified in section 64811.27(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.27(b).

(b) Laboratories accredited for toxic chemical elements of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 34 of section 64811.27 and be in compliance with section 64811.27.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.



Section 64880.30. Volatile Organic Chemistry of Wastewater Field-of-testing

(a) Volatile organic chemistry of wastewater field-of-testing shall be as specified in section 64811.30(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.30(b).

(b) Laboratories accredited for volatile organic chemistry of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 38 of section 64811.30 and be in compliance with section 64811.30.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.33. Semi-volatile Organic Chemistry of Wastewater Field-of-testing

(a) Semi-volatile organic chemistry of wastewater field-of-testing shall be as specified in section 64811.33(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.33(b).

(b) Laboratories accredited for semi-volatile organic chemistry of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 42 of section 64811.33 and be in compliance with section 64811.33.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.36. Radiochemistry of Wastewater Field-of-testing

(a) Radiochemistry of wastewater field-of-testing shall be as specified in section 64811.36(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.36(b).

(b) Laboratories accredited for radiochemistry of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 46 of section 64811.36 and be in compliance with section 64811.36.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.39. Whole Effluent Toxicity of Wastewater Field-of-testing

(a) Whole effluent toxicity of wastewater field-of-testing shall be as specified in section 64811.39(a). Each species shall be associated with an applicable method(s) as specified in section 64811.39(b).

(b) Laboratories accredited for whole effluent toxicity of wastewater field-of-testing shall utilize Federal or State required methods that appear in the publications in table 54 of section 64811.39 and be in compliance with section 64811.39.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.42. Inorganic Chemistry and Toxic Chemical Elements of Hazardous Waste Field-of-testing

(a) Inorganic chemistry and toxic chemical elements of hazardous waste shall be as specified in section 64811.42(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.42(b).

(b) Laboratories accredited for inorganic chemistry and toxic chemical elements of hazardous waste field-of-testing shall utilize State required methods that appear in the publications in table 58 of section 64811.42 and be in compliance with section 64811.42.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.45. Extraction Test of Hazardous Waste Field-of-testing

(a) Extraction test of hazardous waste field-of-testing shall be as specified in section 64811.45(a).

(b) Laboratories accredited for inorganic chemistry and toxic chemical elements of hazardous waste field-of-testing shall utilize State required methods that appear in the

publications in table 61 of section 64811.45 and be in compliance with section 64811.45.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.48. Volatile Organic Chemistry of Hazardous Waste Field-of-testing

(a) Volatile organic chemistry of hazardous waste field-of-testing shall be as specified in section 64811.48(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.48(b).

(b) Laboratories accredited for volatile organic chemistry of hazardous waste field-of-testing shall utilize State required methods that appear in the publications in table 66 of section 64811.48 and be in compliance with section 64811.48.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.51. Semi-volatile Organic Chemistry of Hazardous Waste Field-of-testing

(a) Semi-volatile organic chemistry of hazardous waste field-of-testing shall be as specified in section 64811.51(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.51(b).

(b) Laboratories accredited for semi-volatile organic chemistry of hazardous waste field-of-testing shall utilize State required methods that appear in the publications in table 70 of section 64811.51 and be in compliance with section 64811.51.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

#### Section 64880.54. Radiochemistry of Hazardous Waste Field-of-testing

(a) Radiochemistry of hazardous waste field-of-testing shall be as specified in section 64811.54(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.54(b).

(b) Laboratories accredited for radiochemistry of hazardous waste field-of-testing shall utilize State required methods that appear in the publications in table 74 of section 64811.54 and be in compliance with section 64811.54.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.57. Toxicity Bioassay of Hazardous Waste Field-of-testing

(a) Toxicity bioassay of hazardous waste field-of-testing shall be as specified in section 64811.57(a). Each species shall be associated with an applicable method(s) as specified in section 64811.57(b).

(b) Laboratories accredited for toxicity bioassay of hazardous waste field-of-testing shall utilize State required methods that appear in the publications in table 78 of section 64811.57 and be in compliance with section 64811.57.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.60. Physical Properties of Hazardous Waste Field-of-testing

(a) Physical properties of hazardous waste field-of-testing shall be as specified in section 64811.60(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.60(b).

(b) Laboratories accredited for physical properties of hazardous waste field-of-testing shall utilize State required methods that appear in the publications in table 82 of section 64811.60 and be in compliance with section 64811.60.

Note: authority cited: Section 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.

Section 64880.63. Bulk Asbestos Analysis of Hazardous Waste Field-of-testing

(a) Bulk asbestos analysis of hazardous waste field-of-testing shall be as specified in section 64811.63(a). Each analyte or group-of-analytes shall be associated with an applicable method as specified in section 64811.63(b).

(b) Laboratories accredited for bulk asbestos analysis of hazardous waste field-of-testing shall utilize State required methods that appear in the publications in table 86 of section 64811.63 and be in compliance with section 64811.63.

Note: Authority cited: Sections 100275 and 100835(a), Health and Safety Code.

Reference: Sections 100850(a) and 100862, Health and Safety Code.